

**REMARKS:**

In the Office Action dated August 6, 2007, claims 39 and 41-54, in the above-identified U.S. patent application were rejected. Reconsideration of the rejections is respectfully requested in view of the above amendments and the following remarks. Claims 39 and 41-54 remain in this application, claims 1-38 and 40 have been canceled and new claim 55 has been added to the application.

The office action indicates that the language "information technology links" is not supported by the priority documents. Claim 49 has been amended to recite "information technology linkage" as disclosed on page 43, line 21 of the present application. This language is supported by the priority documents.

The specification was objected to as failing to provide antecedent basis for the claim terms "new support", "negative receptors" and "information technology links". As discussed above, the term "information technology links" has been changed to "information technology linkages". Applicants respectfully point out that the claim terms "new support", "negative receptors" and "information technology links" appear in the originally filed claims which are a part of the originally filed specification. Therefore, applicants contend that these terms are supported by the originally filed disclosure. In addition, applicants respectfully point out that the exact language used in the claims need not appear in the specification. The Board of Patent Appeals and Interferences interpreted the written description requirement in *Ex parte Holt*, 19 USPQ2d 1211 (Bd Pat App & Inter, 1991) and in *Ex parte Eggleston*, et al, Appeal No. 2003-2074. In *Holt* Board stated that "[i]t is well established that the invention claimed need not be described ipsis verbis in the specification in order to satisfy the disclosure requirements

of 35 U.S.C. §112". In *Eggleston*, the claims were directed to a method of forwarding messages between a host system and a mobile client. The Examiner contended that an explicit limitation in the claims was not present in the written description. The Board stated that explicit disclosure of the claimed term is not required under 35 U.S.C. §112, first paragraph.

Claims 39 and 41-54 were rejected under 35 USC §112, second paragraph, as indefinite. The claims have been amended to clarify the issues pointed out in the office action. In view of these amendments, applicants request that this rejection be withdrawn.

Claims 39, 41-46, 48, 49, 53 and 54 were rejected under 35 USC §102(b) as anticipated by Heller. Heller discloses a microelectronic device which can be used, inter alia, for carrying out and controlling multi-step and multiplex reactions, e.g. molecular biological procedures, in microscopic format. The device comprises a matrix having a plurality of self-addressable microscopic sites suitable for site specific immobilization of biomolecules, which biomolecules, in turn may be reacted with an analyte to be detected. Detection comprises the use of an integrated sensing component or an associated optical imaging detector system, which may contain a CCD-detector or an avalanche photodiode detector in a sandwich arrangement with the device. Heller does not enable light directed synthesis of polymeric receptors from suitable building blocks. One skilled in the art would interpret figures 1 and 2 in combination with column 12, line 35 to column 15, line 42 of Heller as showing that the microlocations for attaching specific binding entities such as oligonucleotides are located on a metal or metal oxide layer of the device with the remaining surface being coated with a layer of silicon nitride. Thus, the support in Heller is not transparent. Therefore, Heller's device does not allow

the light directed synthesis of polymeric receptors by specifically photoactivating predetermined positions on the support and does not enable detection of fluorescent binding reactions by using a sandwich arrangement of device and detection system. The present claims have been amended to clarify that the site and/or time specific immobilization of the receptors or building blocks is effected by photoactivating predetermined positions. In view of these amendments and the above discussion, applicants request that this rejection be withdrawn.

Claims 39 and 41-54 were rejected under 35 USC §103(a) as unpatentable over Heller and Winkler. As discussed above, Heller does not suggest or disclose light directed synthesis of polymeric receptors by specifically photoactivating predetermined positions on the support and does not enable detection of fluorescent binding reactions by using a sandwich arrangement of device and detection system. Winkler is cited for the disclosure of channels but does not suggest or disclose a support which is at least partially transparent such that light directed synthesis of polymeric receptors by specifically photoactivating predetermined positions on the support can be carried out. Therefore, Winkler does not cure the above discussed deficiencies in Heller and applicants request that this rejection be withdrawn.

Applicants respectfully submit that all of claims 39 and 41-55 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

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